

gtagagcaat tatcccagtc tttaaaactg gatatgaatg agattcacc 5100  
 tttagcgatt atggtgttga ttccattacc ggtgctagtt ttattcaaca gcttaatgac 5160  
 acgctgacac tgactttaaa gacggtgtgt ttgtttgac acagctcggg aaaccgactg 5220  
 acggcctatc tgttatctga ctatggtgat gatacgcg agtggttagc aacggcacca 5280  
 gcgttggttg atcatccaca gagtgtcgtc ccccttcgt tatcgatgga gtccgacga 5340  
 agcacacaag ccaagccctt gccttcagtc ccccttcgt tatcgatgga gtccacccgtt 5400  
 caacaggagt cgatagcgat tattggtatg agcggacggg ttgcggcgctc agaaaacctg 5460  
 gaagcgtttt ggcaacagtt ggcacagggg gtggatttgg tcgaacccgc gtccgctgg 5520  
 gggccacaag cggagactta ctacggcagt ttctcaagg atatggatca atttgatcct 5580  
 ctctttttta atctctcgg tgtggaagcg agttatatg acccgcaaca acgttgtttt 5640  
 ctggaggaat cctggaatgc actggagaat gcgggttatg tgggtgatgg catagaaggc 5700  
 aagcgttgtg gtatttatgc cggttgcgtg tccggtgact acgcacaaat gttgggagac 5760  
 caacccccgc ccaggccttt ttggggcaat gccagttcta ttattccgc ccgattggcc 5820  
 tattatttaa atcttcaggg ccctgctacc gcggtggata ctgcctgctc aagtctcttg 5880  
 gtggcgggtgc atttggcctg ccaggcccta cacctggatg aaatggagat ggccttggca 5940  
 ggagggtgtg ctctttatcc aacccccatc attgtatgag tctttgcgtg gtgcagatat 6000

FIG. 22K (cont'd)

[illegible]

FIG. 22C

ggtgkacccc	arttgaayrt	daaacyttam	acccgvgggt	ttagacactw	adacgsaata	1740
agaahaatd	htgvghatc	gsgtcggnc	aaaaccaata	tgggamacyg	gsaccatggt	1800
wggctgggtd	tggggggctt	gtkkgatrr	kkaaagntgg	tgttgtcgat	gcaacacgg	1860
caaaatacct	ccatcgctac	attttactca	gggcaatccg	aatattgact	ttgatcgcag	1920
tcctttttat	gtgaacacccg	agcttcgtga	tbggtcgggtg	ggtgaaggag	agacccggtg	1980
tgcgacggtg	agcgcttttg	gatttagtgg	taccaatgcc	catgcagtga	tagaagaagc	2040
gccgccagtc	gtgcgccaac	atgaagagca	gccgggttat	ttaagtggtc	ttatcggcgc	2100
atagtgatga	tcaattacgg	cagcaagggt	gagaacttta	tgcgggttat	tgtgagcatc	2160
accctgagtt	ggatgtgggc	aartcytgag	rttatacctt	attgnttggg	ntcgtcaaca	2220
ttgntcgca	tcgtctggct	ggtgntggcg	tngtgatctt	gaggatttgc	ggcggtcact	2280
ggatcagtg	nttgggtcag	ggtaaaggctc	cccgagtgt	tgtngtctng	canttggctg	2340
agggtgaacc	acngtctanc	aagtttctct	acagcacgtt	ggtaatgaat	gtataagagc	2400
antgcagtga	gtcctgttct	gcgaatcact	atgtggacgc	gttatcgacg	gtgggggawt	2460
tatatgttca	gggttatcca	tgggagtatg	gtgtgttgtt	tgsccakggc	watrrwcktw	2520
ttsskttkcc	gamctakssg	tttscwarkc	agcgttgttg	ggtaccacaa	acaataagcc	2580
actccacagt	ggatgctata	tcacagcatg	ctttttttaca	tcctttgtta	catcgaaata	2640
cttcggactt	ttcatgtcag	cgttttagct	ccacatttaa	tgggagtga	ttttttctta	2700
ctgaccacct	tattctaggc	aaaaagatat	tgcccgagc	cgmtymtttc	gaaatggtcc	2760
gagaggccat	caaacaaagct	tgtggatttt	tggataattc	tgaagtgttt	attcagctca	2820
atgatattgt	atggacaaaa	gtgattgcag	ttgatgatga	tatcaaaaga	gtacataattg	2880
atcttttttg	tagaaaaatgg	cagtgaatca	tgcttaacgc	atgagtttga	taggcaaaaac	2940
atatcgctta	actatgaagt	ttatacgcaa	aatagtgagg	gaaatggcag	gcagaataaaa	3000
aaaattattc	ataatcacsg	catggtcacc	ttgagtttct	ttgaatacaa	ccggagggtg	3060
tagatcttga	tgaactacsc	mgccmctata	aatcaascaa	gtcttanatg	ctgaacaaaat	3120
gttattttgg	gtttggaatc	aatatgtgtt	cakwttgggtg	acagggcmccg	atgtatarat	3180
acsgrwtatw	tcggtgagca	tcaagtatta	rcmaaaactyt	ytwtgccaga	aattgcaggga	3240
gawtgggata	artsctttgt	tttgacccca	ggcatggtag	attctgcttt	acagggccaca	3300
ttgggtatta	cttctgatat	caatgatatc	atggtagccg	atcgccaagc	cgattatatc	3360

FIG. 22L (cont'd)

ttgacccccca agtcgacgct tccctttgct ctkgwmaaaas tkkaawtway ysgaaaaygt 3420  
 wcagattcta tgtgggtttg gattckaaat tctttatcga cagaccasaa gtctccacgc 3480  
 tcagcccggt aatgatatac aacatctcga cattgatcta ttggacgctc aaggaaaaagt 3540  
 atgtgtgcga atgcgaggtt tctgtctcgc tctgttgcgc aaacaatggt taattcacta 3600  
 scagaagaac cgtttacagc ttgaataac cagcaagcac cnttactttt tccaatccca 3660  
 ggtatggcgt tncgccagac tcttatccaa gtggccaatt aacctacct taawtgatgc 3720  
 cgggtccatc cttgggttgg ttgtacgnat ttgaaatatg gacttaatgt agaaaaataga 3780  
 aggatgtaga ggtttattga ccttacactc ccaaacccact tggatttaca ggatcgctac 3840  
 ttgtgataat tgcactgcag gtatttgaaa ttgtaaaang acgtaaatgat agataaatcc 3900  
 gtacaaccag tactgattca gttgttagtt cctaattgat gagaaacaagg ggtattcacc 3960  
 agtttattgg cattactaaa ggtggctcgc tcagaaaaacc ccaaagtgat tacacaatta 4020  
 attcaagtac aatagtcccg caaacctcgc aaaatttact acggattatc actgaaaaata 4080  
 gtcatgatat aacacatgca gaaattcgtt atcacttggn atcaacgtga atgtttgktt 4140  
 tggkaascag tacccaaatc ccggtggaat tagcgtcaca gtttgtcaaa gcgwtacgag 4260  
 ttatytctwtt mcgggaggka ttaatcttkg taggkcskct accactcmat grtgaaaaaga 4320  
 tgagtcccac aaaatcggta ggratccggt gggggaccat tattaawtmc tatcaraacr 4380  
 aatcttaawtt aactagaact aagttaaagc wttgwttaaa raaattkttc ascaawmcgg 4440  
 gatgtaagcc aacanggatc attgtgcagg tattgtcaac gacaattttta ttctcaaaaa 4500  
 tcaattgaaw ggkgktttsy aggtattggt gtntaaagta tcnggtnctg tcaatttaga 4560  
 gtcctcgaca gaatacaaaag aggtattggt tcttatnnta ntaaaaaacgt tatctgcagt 4620  
 ccaggcanca canagnatag agatggattt gtnttagata atngtccaaa tactttttcc aggtgttggg 4680  
 attcggannn acagnacagg tggaanccaa 4700

FIG. 22L (cont'd)

gcncctnccg	cggtgggcgc	cgctctagaa	ctagtggatc	ccccgggctg	cagtattcgg	60
aaatgcaggt	caatcagatt	attcaacggc	aaataaattt	atggatgagt	ttgcacgcta	120
tcgtaatgct	ctggtcaatc	gcaaagagcg	ctatggttta	acactatcga	ttaattggcc	180
gtactggaga	gaaggaggta	tgagtattga	ggaaaatttt	gaaaatataa	tgcaagagaa	240
taccggtatg	tccgccctgg	agacatcaca	aggtatbgaa	gtattacaaa	gagcttggca	300
gttgcagtac	acgcaattgt	tggtaattgt	cggagagatg	aagcgaatgg	agagcttttt	360
gcacaagcag	ggtttcgagc	agattcctgt	ggtatccgcc	gatactgtca	gcgagaataa	420
aacctcgact	attgagaatc	tttcagccga	tgtagataca	ttaccattca	ttgaggttca	480
ggcatacaat	atggaacaaa	aaaccccttg	ttacttaaaa	aatgtatttg	ccaccacaac	540
acaaatcccc	gagaaaaata	tttatgttca	tgaacattg	gataaatacg	gagttgattc	600
attgttggtg	atgaaaatga	ccaatcaatt	ggaaaaagta	tttggaaaat	tatctaaaac	660
cctatttttt	gaatatcaaa	ccattcgcga	actgggcgat	tatttcctga	aatttcatga	720
tgaaaagtta	agggagtttt	ttcagataga	tagcaaaacta	tctatgttaa	ataatcacgg	780
agagattgaa	gttcaaaaaa	aaggggatga	accatcgggt	ggagacagat	ataagtcagc	840
tggatgccgt	gcctatctcg	gtttatatcg	cctgtgtcag	cagtgaatca	tcaaccaaaa	900
aaatgttaac	aatggttccm	atantcatca	gccagtaatg	ggatattggc	gawtatggg	960
tctgagkggg	tcgttatbcc	mcaagcctga	gaaatatnng	agggaaatac	ggggaagaaa	1020
tttgtgtcaa	nggcaaggga	ctggatttan	cnggaaantt	ccaaaaggag	ccgttgggga	1080
ttggsaagac	tattwyacms	mtnnngatcc	stattcagcc	mngtggggaca	tcgcagtaaa	1140
tnngggkggg	tttattcggg	atggtgataa	gttcgatccg	ttatttttta	atatttcccc	1200
tagkgrggkg	gagctyrcts	atcctcagga	ay'kwttat	yttagrgtcc	gcgtkggctg	1260
cattggaaga	ccctggawat	tgccgggnat	tatttgcaaa	tgttgtcatc	aaggactaaa	1320
tcttcattct	cgtcgggraga	tgttgggtgt	tatgtggrag	tratgtcttc	agaatatcag	1380
ttgtttgctt	ttgaacagaa	wttacgtggt	caccccatat	cctcngggtg	ggagttatgc	1440
cagtattgct	amccsggtgt	cttatgtttt	aratctacac	ngggcccaasc	atgacagtgg	1500
atmcgatgtg	ktctarttctg	ttaacgacgc	twacactagc	atgkcaaggga	tttaaaaactg	1560
ggkcgaaact	gaccygggga	ttgkcgggkg	agttaawatt	accattcacc	ccmataaata	1620
tyaggcscctg	agtcacgcyc	aaattattty	tactagtggg	sgttgccaaa	rttttgggtga	1680

FIG. 22M

acagggacag ggttatatcc ctggtgaagg agtgggtgcc ataatactga agcgcttggc 1740  
 cgatgccgag cgtgacggtg atcatattta tgggtgttgtt aaaggcagtg ccgttaacca 1800  
 tgggtgtaaa accaacggct ataacgttcc taatccgaat gcacaacagc aagtggtag 1860  
 tcgtgcacta cgagaagccg cagtaaaccc ccatactgtg acttatattg aggcacatgg 1920  
 aacaggaacc caattgggtg acccgataga aattactgkt ctrammaaag cgttcaatag 1980  
 tttgaccaat gagcttgggt taagcgctgt gsccaaacma tygkgtttga tcggstcark 2040  
 gaagtcaaaa tatagggcat tgcacaacgg gtcaaatagt cccttcttta cattcaaaag 2100  
 ttgttacaaa tttactgtga tttactgtga ctccctttgt agtaaaccaa gggttattgg 2160  
 caatatgtat acttgaagt gaaggaaaga gggtrccgag aatkgctkky mwwwckkyyt 2220  
 tggctcaaat gcccatgtag gcccatgtag tgattgagga gtacgttgcc agcaatgaaa 2280  
 ttttcaagga aaagtaatta tccctttatc ggwwatagac tskgatcar ctacaaraa 2340  
 warkggatcg tttgcttaag tttatcraaa aaaatgaagc aaaraggtag ggaawtksgc 2400  
 ttaattgwtg ttgcccwawa cattgcaact tggcgcgag gtcaatgara ggaacgtctg 2460  
 gncmttngan ttgtaggaat cnaataccaa atgcttaang gaaagatttt agcaaaagnt 2520  
 ttaaatactc agaaaatnga tgcacanatt tttcggatc tttctgaag atgaagaata 2580  
 ggggttcgta ctagacctgg gtgcgttgra tttcgtatt tttctgaag atgaagaata 2640  
 tggccaacac gcttgatatt ttggattcaa aaaggtaaat actttaagnc tggcggagct 2700  
 ttgggtataa ggttgacta cgtattagtt tgccnaacng tacccttttt taaccagaa 2760  
 taaatatttg aaacntcgt cgtattagtt tgccnaacng tacccttttt taaccagaa 2820  
 ttattggatt nccnaagtgc tttccacaa ncaaacattt tctacagtaa ttgaggcaga 2880  
 cgccaaccma aacattgaat gagctactgt gttttgaaga aaaatggcag gtgcaatcgg 2940  
 aactacatga ctctgttgca gatcaatcta atgttatcaa atgttatcaa atgttatcaa 3000  
 ctgagaaaaga gcatcaaaaa gcattacaac aatcaatatc attccatagc ccgaaaaaac 3060  
 gattgatttt tatcagccag gctcaggctt atgagcagta ttcacatagc cactatgcgg 3120  
 ttaatccaga aataggaaag acgtaccaa acgtctttca acacattgtg aaaaagtatt 3180  
 ataaaaagtga tgtcacggac ataattgatt tatgggctct agaggatgaa cgctggatta 3240  
 cgtctcctct acctattgta tatcttttaa aaagtattga ggtttcttta ttaaaaaccar 3300  
 3360

FIG. 22M (cont'd)

aaaaattact atttgttgga gaatttaaga caagcttakc rrcgaytgty acyykraakc 3420  
 cwrqkkgggw ttygmamrwy ckkwaksgtt dgtgcaacsq ratwtkragg ttgcggtgtt 3480  
 attaraggcm rtggaaggta ctyaatccca tmcagtgaca aagcaaatgg atctttggat 3540  
 agaaaaattg tggtcgtcct taaaagccca aaaagtctcat agtagcttat accaaaaatg 3600  
 tcgtagatat ttttctgaaa accccamcgg ctgcaanctt gtcatgaacc aaagtattca 3660  
 aatgcttaca gggracttta ttgataacag stgsygtgr aggactgggt tttgtcttyg 3720  
 cagattatct tccaagaca tataaaatta atctgatatt ggttgggcgc tctgatcttg 3780  
 ataaagagaa agswwtcgsr ratwcrgrmt ykgkwmaat caggtagtcg agtggcttat 3840  
 gttcagacgg atatctgcga tgaaaagaat ctccaattgg aattggatat tgcccaaaaa 3900  
 tattgtggcc ctattcaggg tgtcattcat gccgcgggca tcattgatca gaagacaatt 3960  
 ttgaaaaaaa gtcctgaaaa ctttcaagca gtattagccc ntaaaattca gggtaacattg 4020  
 attctggata acgtattgtc agcgaatca ctggatttta tatgttactt ttcttcaagc 4080  
 tcggctctat tagtgatgc aggtatcatg gattatgcaa tggctaactg attttgatg 4140  
 gcccatgcac agtatagaaa tacctyggta tctgaargaa aamscaaggg raagacmctg 4200  
 kttwtctcat ggccgcctg gaatgtgaaa ggaatgggat tgaatggact ggaatgagaa 4260  
 cgtgaaamca ragttctwty ttaagtccaa gcgggcaasg tctattggac ataaaggag 4320  
 gttgtgaggt tattgaacac attrctggct caggattatt ytcagtgtcy tawattggst 4380  
 gkgaggaaaa accngtatcw aacaattttt tgggtctcac acaaagatgt ttctnacctc 4440  
 acaagtgagt caagggcagg magtrawgaa cwwasrrswk kmykkrrass ksyamyaaac 4500  
 gagctgagat agaagacttt aagtgttgaa gaatgtatta ttttggactt aaaaactctg 4560  
 attacagagc aacttaaaat acccatcagc tcatctggat gtagagagta atttagcaga 4620  
 ttttggtttt gattcgggtca gtttagcaaa ctttcccggt gstttaagta ttcmtatca 4680  
 ttycaawawt acgccrtstk tatttttcgg atatcctacc atagagcgtg taarccgta 4740  
 ttttttaaaa gaacmcmctg cgsttatgga ggcgttttat cagcagaaaa aaacatytw 4800  
 tagtaacaat acvctgtccg ntatagtccty tcatgtcaaa gaaaagccgw caactgatct 4860  
 aatatcatcc arcngcctct nccttttatt gcagatccat tgccccctca ggstattgag 4920  
 agtattgatg agcctattgc cattattgggt atgagtgggtc gttttccaga agcgcgtacg 4980  
 gnttaagca atgtgggaga ttttatccga aggtaaaagt sytgtgcagg agattcctat 5040

FIG. 22M (cont'd)

agagcgcttt anattggcat gaattattatg aacacccatc ggatgatggtt ygaanaandb 5100  
 taatagtaaa tggagygcct gcattcctgg tattaagaa ttcgatccac aatttttoga 5160  
 aatttctcca agagaggcaa aaaarctgga cctctttcaa cggcwcttat cacaggaatc 5220  
 mtsgaatgca ttggwaaats ctgcttatgk wwwmywacrc wkwgmtmwtw aracratggg 5280  
 ataykttkat tggtrttgaw smaggktwtt atmmrrrymw gmtcaatkmr gwygacsgca 5340  
 cacwttwawc catmakrmta ttttrgcata ccmgtytgsc agtwytywtt arakyttaat 5400  
 ggscmwrssa tggcwrtwaa wrccgcwtgy tcctccgsyw tggyygcrmt tcaccamgt 5460  
 kscsysagtt tackwcarca agcaatkyga wrcgsckawk gwcscggcag cwwytrmw 5520  
 mwyacrsk sawswtkaws tggscwtgay ssawgsgrgy mtgakmysac mwgawgsyat 5580  
 amygawakac ckarnrtcam csygccaaaks gcryagtgmy tggakagsmw gytgwtgcar 5640  
 tcgtaytgma acrwmtcttk sgggktttcc aaaaggggtt mnaaat 5686

FIG. 22M (cont'd)



FIG. 22N

tttctcaaaa	ttatccaagg	aacttacctt	ttactcgaat	taccctaaat	tttttgaag	1740
aaaaagccta	tcaaattcgt	caccggaatg	aaaatgattt	gtctgcattg	atggatttag	1800
aaaaaaatttg	tcgaccta	aatcaatggt	tatgcattga	tgaccttcgc	caacgcatag	1860
atgaataccc	aaaaggtcaa	tgtgttttag	aattaacaaa	taccattggt	gcagtgat	1920
attcacaaaa	gtgtattaat	agagtgttag	gcaactgctgc	aggtgttttg	carswswwtg	1980
scmdhggaa	rtgbdwddac	datttvtaba	thactbgttt	atcaatdtaw	trcccaaat	2040
aaaaaaagaa	tatgccatmc	aattattaca	gtttatcttc	tatyttatcat	ggtgttcawa	2100
atgatgttga	agatgttat	ggtattgatg	aatgttatca	gtgcttaaat	gagaaaaacga	2160
tacaagcagg	cagtttttatg	gaaagtga	cagttgatgt	tttatattcc	aagagtagaa	2220
aaacatat	ctaagtatcc	caatagatat	tggagtaaat	gctctggatg	cagagcagga	2280
aatggggtg	tttggtgcta	agtgttact	atctattttt	caaagccaag	gagtgatgaa	2340
aaaatcaggt	gagtattatc	aaaaagatca	attngaggtt	gatgttaaat	attattccaa	2400
aatattatcg	attatttgag	tgcttgctac	tcataattng	aaaaaagaaa	gcttatttca	2460
attcaaaaaa	atacnggtgc	aaacactttc	caatattgat	gaatttgctc	ttaacgatcc	2520
attggtnnga	gtttgcttcg	tnttaagcgt	acgttttctc	ctcaatatgc	tagccttatg	2580
cgwttctac	gattaatggc	atcgtgcctt	tctcgggatt	tggaaatatt	aacaggcaaa	2640
atacaggcgc	atgacattat	ttttccagaa	nggaggggatg	aatttatattg	aaggtatttt	2700
taaaggctat	caactttcag	actattttaa	tcataattctc	gcagagctga	tttatgaaag	2760
ggctanacgc	tctatccgggt	gggtaatatg	aantaacaaa	attcgtattt	tagaaaaaag	2820
gagcaggtag	ctggtggtgc	caacagaggt	tgtatngaa	tagnagcttc	mccgctnctc	2880
gaatggttat	aagagtttta	cntatactgg	atatctnctg	ccntcgttcc	ttcgttatgg	2940
gagaaaaagtn	agattttycc	gataaaatn	ccctggtnng	caatataaagg	tgttagatat	3000
ntgaaagnca	atttagantg	cacaagggtt	ttaccctgat	agctttgata	tnngtgtatg	3060
catctaattg	tnctccacga	tacgaaaawta	tatacagtat	accctttccc	aaagtga	3120
acatgcta	gcaaaatggc	nttgttaatg	ttgaatgaan	tttactcngg	atgaanggat	3180
ttgttactgt	ttaccgggtg	tttgttagat	ggccttttgg	tatatgaaga	ccctaccaat	3240
cgattggata	atgtctgctt	gttaaatggt	gatcagtg	gatctatat	atttaaatca	3300
ggctttnaaa	aatgttaaa	actttgtttt	accttttgaa	aaacttaata	ttgagcaaa	3360

FIG. 22N (cont'd)

tcaaagtatt attgtctctg agtgattaa tgaagacctg tctagtaatg nttgaaaatg 3420  
 tggtagaaaa taatcanttg ttttagaaat acaaaatcac tcntgatncc gattactngt 3480  
 ggagnaataa aattagntta caattnaaaa gacaantcmc wtcgttanca caatagtatt 3540  
 ggaagaaaaa atttttataa aattttagnng gggataaaaa gaaaattatn ggatttttct 3600  
 ccntaaacgc ccctttgatt ggagtttatg ggttgattc atattcgaac ctacnttggg 3660  
 anttaaagat cattactcgg kragcmtyt tcyataaaac trgaasmtac tttkktmtky 3720  
 mawkatkraa yrmktsckkm rsctmtytgw kwcmccsay atsattcmag wtrascytsr 3780  
 wattrtcgmt arakwcccta ttacggaaga gataatgact ggaggtacgt caagggtaar 3840  
 aacagggcaa tcgaatsaka atgaacctat tgcgattatt ggtatgtcyt gtttatttcc 3900  
 aggtgaggtt acgacagttg atgagttctg ggaattatta atacaagaaa gacatgccrt 3960  
 tcaaccctta cctaaggagc gttggcaatg gccakaaagt gtgatccat cgggagcaca 4020  
 acttggcatt gatcaggggt gatttctgga tggattgat acctttgatg ccsacttctt 4080  
 tcgtatatcg agaaaagaag cggagttwat ggaccctcas caaagaaaaa tacctggaat 4140  
 taarttggca ggtcatasag catgccggat ataaacccat cgytttttcc tggtagaaga 4200  
 natygyytc tatgtgggtt gctttgtcac cgtaattta tatggaggtt atttaactaa 4260  
 aagtgaccaa angccctaaa aaccaaccgg naaggcctat ttkcatgacc argtartana 4320  
 ttgttggtcg tytttmccc aataanaatt ttcctatttt ntattaattt tttaaaargtg 4380  
 cccmscstcc tctwtctgat wccngccttg ttcaaryagt tttagggtgc ctwttttgacc 4440  
 caancarttt tatgcgnatt caattcgggg nangngtgga atcaggcntc tggtaggntg 4500  
 gggaycaatt waatrctccc tccsmrtgaw accggtttct tnattayywa gcaggtntgt 4560  
 tntcaaaatc ngggaatgta aacctttnga tccaccgcc gtbggttttn tncctgggna 4620  
 aagggggcgc tnttcttttt ttnaatcntt ttctcancct nattttaaaa ngattgtttt 4680  
 ttngggggtt taaagggggg agatnaaaat nggggggcaan cattnnttac ggcctaac 4740  
 tnnng 4744

FIG. 22N (cont'd)

gangattcct ncnctnccc attgaaaaga ggatggattn gancatatgg gtgtgcctgc 60 SEQID NO:33  
aagaagataa gtcaatatataa tgtaactcag aaaaatcaat tcccaaatg aataccccc 120  
aatcwataca aaaaawattg awagattttt kggtkgacat tactaacttt tsaggagcna 180  
agacatcmat ccmrgcmgga tgcctggtga ctatggtgkt gattccatta ttaggtatga 240  
gatttyttaa tcgaattaac cyccaccttt aawatagaag ctgatgcttt attactaaca 300  
gaaggaacga ttmaccagta tatctcataa arkwmttct tttattgttg ataaaaaaa 360  
ttacccaatg ttaccaaat ttggattaga aatgattct aataaagaaa ataaaggctg 420  
ggtaaagcct tcttttattg aattattaa atttgaatc aatcctgaat atatagaaag 480  
cagtacaaaa aataaagatt acgcgattct tgaataatcta ataaataatg gagtggagt 540  
ttggagagaa aataatcatc tatgttttga gtttttttat gaaactcata caaatgaaac 600  
aattaaaaaa atagtgtttt caccgaaat actttttaac tctctagata aaggtaaacg 660  
atactttcca agtagctgcc agcaaaaaaa cagctctatat caaacggaaag ttgagaagt 720  
tccatataat cttattcaag gatttagagt ggaatgcga gtcaatattg aaatttttaa 780  
taaagcattt aatcatttgg ttaacacata ttcaattttc agaacaaaag caatgttgat 840  
caataagcaa tggattcagg taatacatga tggtttatca gtaagatgcg aaganaatta 900  
yatcgaagg attatctgca gaaaaaagat ttacgcgaac aactaatnag tattcaaaa 960  
agagcaagg aaaaaattat ttgatacga taatctgcct ttattaaaaa tttattttat 1020  
ccataatggt aaagacttag cagctatttt tgttcatgct catcattttt gtccgatgg 1080  
atttacattt ttttcttttc agaaagaatt tcatgatact trtgaaagta ttatraacgg 1140  
antggrwat cgggaaacgk gttcsawaaa gtgatggctg aatatggcca ctttgcatg 1200  
tgtgaatata atcccaaaa caaggagctg acaaaaaact ggcttgataa aattcgagat 1260  
aaaaattttt ctttaaaatt taaagataag aaagactatg tcggtcaact gtcaagtgg 1320  
gaaaaaatta ttgagctaga agtttctgta aatatgctgg aaaaattaa attattaat 1380  
gatcggaata ataccacact gacgcaattg ctatgttgct ctgttgcaat ttactgtat 1440  
cgcctctcga ggctaccagt acccttgcaa atggtcaaca gccgtagaga taaaatagaa 1500  
tttgaataaa tgatgggtga ttttgcata actctgccct atggatttta ggaacctttc 1560  
caaaagcatt ttctctattc cnggatggta ccttttttaa gttattggaa aaanggaaaa 1620  
agcncntnaa ttntcccccc naggattttt taaanggggt ttggatnntt tntcngggaa 1680

FIG. 220

```

ccctcaanaa aaaaaaaatt tntttccaaa aaaaaaaggg gccctttaa ntccccatta 1740
aggaatttt ttaaattttt taatttcccg gnaaaatta ttnttttaa ttccggaatt 1800
aaggccnaan tggaattaat tggnaaaatt tccantttgg gtttttaaaa aggggaaaaa 1860
ncccannaat ttgggtttcc taaaaaanaa aaaaagggg gngggcccc cgttgggttc 1920
ntnntgggg gnaaaattt aaaaatttaa ttn

```

FIG. 220 (cont'd)

FIG. 22D

ctgcgcgatt ggcagagacc gctgattgat ggaaaaaacag tgccgagagat tgcgggtgtc 1800  
 ttttcatttg gggcaggttg ttccaatngc nttaactggtt gattgaagag tatattgcga 1860  
 agataccgac aaataaacacc agggaatcta taaaccatag gtctattatt ccattatcag 1920  
 cacgaactgc tgagcagttg cggcaaatg ccagtagatt gctggcattt attgaaaaa 1980  
 acaagcaaga cagcgtggtt acccccttaa tagatatgct ttatacatg caggtaggac 2040  
 gcgaagcaat ggatgaacgc ttgggggttta ttgtgagttc aaccgatga attagtcgaa 2100  
 gaactacgaa gatattctca aacacacgat gatatggaag agctttatcg aggtcaggtt 2160  
 aatcgatatg aagacacctt tcttactatg gcggctggat ggaagatctc tcttgaggct 2220  
 atcccaccca ttgggatta aaaaacgaaa aactgggtctt aagtttaatg ccaattattt 2280  
 gggatttaaa aggggtcttt gtggatttaa wtkgggrkr agwtataassw tkkyttmcca 2340  
 aargrkgwtw ktcycsgcr matkarmkka ytacctrtcc yttyggcrgs matattttta 2400  
 rgwtkktamm swtyrnmccc tcwtwcctyt tktgrcccc aggnccaaa tttattttng 2460  
 tttngnggga atttngtttt aaaaaagaat tcggttaanc ccacnccn ttaaaccttc 2520  
 attttggggg gnaatgggtt ttattggnaa ccattccna aaacccaaaaa ngggcctttt 2580  
 ttttttccat tccnaaaaaa accaaatttt ggccccctttt ttggggggggg gaaaaaaaaa 2640  
 acccnaangg ggaataattn tttttaaaaa aa 2672

FIG. 22P (cont'd)

SEQID NO:35

FIG. 22Q



```

yytycrtart twwtaattyw maarstatna mttwttcaww attcctatyg tnaawwaccc 1740
ywtattttkkw ktaaaaamcag cyscatwttw wyyssskgtm attwnyycc nctttwttrw 1800
wmcccmmytt gcgrrcsgtt ttttcgkklc ktgtttcrwc akagaatctm mmsycctttt 1860
ytygcmmma anmrnttaa acmmmtwrc ttttytttrgr kggsgycccc cncccnsggg 1920
gaanccccc antgggtccc cnnttttggg gggggggntt tngnnaangn aaaatttttt 1980
tttcatgccc nnanaaaaagg tccttccgca acctttttta aaaaataanc cntcccccna 2040
aaaanttggg natttgggan tgggaattaa aaaggcccc tttttacccc ccgngttta 2100
attttaattc ccccttttt ttgttccggg cc 2132

```

FIG. 22Q (cont'd)

FIG. 22R

```

ttaccggcgtt aacarsyttc catggaagg taggnttaw atagscrca tatttgccy 1800
tkggtgrtgg aatrawrgtw atkcskggg wccwgstamw wagggttggg ttytcaaac 1860
cawawraamm skgttttytg rrkwttttt tssmmmgcc scnaaatng aacccccnn 1920
ngngtaaaanc ccnngaaat tnntntttt ttttncccc gnnccccaan cnaagaaang 1980
aaccttncg nggttttggg caattaaat taattaggc aaacccccn ttaatngaa 2040
ggggggncca ntggngngt tttttngga aaaaggagg gnaaaagg gnaaaagg 2100
cccccccaa ntnggtttt aaaaaggga aaaaaaatn aaccgtttaa aaaaattnc 2160
ccccaaant

```

FIG. 22R(cont'd)

gcaccgttgg	aacgttatgg	catcgattca	ttgattgtga	ttcaggtgaa	tcaggcgttg	60
gcggttattt	ttgatcgct	gcctaaaaca	ctgttatattg	aatatcaaac	gatagacgcg	120
gtcgtggctt	acttggttga	gcagcacgcg	caggcatgta	gggtgtggac	gggtttaacg	180
gcaacgggtc	aagctcaag	agaggtgtc	atctcctcta	cctcatcagc	gggtgttgaa	240
cctgtgacac	cgagacagaa	agaggggtcat	cctatacaga	aagacatcaa	gtgccgagaa	300
caccacagtga	cagacgagcc	tatagccatt	attggtctga	gtggacatta	tccgcaagcg	360
aatagtttgg	atgctgattg	ggaaaacttg	aaggcaggaa	aagattgtat	tcgtgaaatt	420
cccgatgacc	gttggtcgct	agacggtttt	ttccatgaag	atgttgaaga	agcgattgcg	480
caagggaaaa	gttacagtaa	atggggcggt	tttttagagg	gatttgctga	tttgaccct	540
ctctttttta	acctatcgcc	gcgagaggtg	atgacgatcg	atccacagga	gcgtttgttt	600
ttacagagtg	cgtgggaagc	tgtggaggat	gccggttatc	gcgtgctcag	cttgcttcgc	660
agtttaacaa	gcgtgtgggt	gtatttgcgg	gtattaccaa	gacgggtttt	gattttttatg	720
gaatacaatc	ggatcsagct	sbtynycgc	wnataacttc	ctnttackcc	aggtttaaaa	780
rgccwmgwtc	agctntkttt	tsgggttttt	taabthhgcg	ggkgggtktt	ttkvscvwa	840
tnagcancsg	dcggtttttk	mattttttta	wtggraanac	nncaatcggg	atcaacntct	900
ttntccgctt	atacttcctt	tagctcagtg	gnnctnaatc	gtgtgtcttt	atthtttggg	960
tttacaaggc	ccaagtcntg	tnctattgat	accatgtgct	cctcatcttt	gacgggcaata	1020
catgaagcct	gcgagcatct	gcatcgccaa	cgatgtgaac	tggctattgc	ggggggagtg	1080
aatctttatt	tgnccacctt	caacctatat	tagatttgtt	actttacgga	tgctttccaa	1140
agagggcctg	tgcaaaagct	ttggttatgg	tggtaatggg	tttgtaccgg	gagnaggggg	1200
ttggcgctgt	gttgttgaaa	cccttgnttc	tagagccatt	caggatcagg	atagtatata	1260
tgccattatt	agagggagtt	gtgttaatca	tgggtggcaaa	accaatgggt	atactgtgcc	1320
taatccacat	tctcanaggc	gatcttantt	cgtgaagcct	tggantaag	ctcangngtt	1380
aantgccccg	atnggtcagt	tatatagaag	ccncatggta	canggtacag	agttgggtga	1440
ccncaataga	ggtaaagagg	ttaacgcaag	ccttntcaac	aagatactga	tgatgttgg	1500
tttttgtgat	ntgngtttca	gttaaatcta	nataattggc	atcntggaag	ctgccgctgg	1560
tatcgctggg	ctgagcanaa	gttatcttgc	agatgaagta	tgaaaaaata	gtggcaagcc	1620
tacatgcaga	aagactgaat	gccaatataa	atthtgaaca	aactcctttt	gttgttcagc	1680
aatcacttaa	tqaatgggaa	agaccaaaac	ttcatgttaa	tggaaaaaatc	aaagaatatc	1740

FIG. 22S

ctaggaccgc ggggatctct tctttggtg cgggaggac gaatgcacat ataataatc 1800  
 aggagtatat tccagaagtc agtcagacac gacaatcaga ggtcaggaat aaaccagctc 1860  
 acccgggtggc cattctgcta tctgcgcata ctccgctca gttactgaag atggccgagg 1920  
 cacttttact atttattcgt accatagtga ataatatgga ctcatcctat tcggcagggg 1980  
 atgagatgac tcaacttggta aatgtagcct atacattaca ggttggacgt gaagctatgc 2040  
 aggaacgcct ggggtttgtt gtgaattccc tgagtgatat tgaagtgaat ctacaaaaat 2100  
 ttattgataa ggaaaatgat attgaagact tttatcggga tcaaatcaag actaaaaaag 2160  
 aaatctcagc tctatttaat tcggatgaag atttgcagga agtgattaaa caatggatgc 2220  
 gacaaaaaaa actatccagg cttttgtcac tttgggttaa gggagttcac tgtgattgga 2280  
 acttcttgta tcaacatatg cgaaccaaaac cttatcgggtt acattttacca acgtaccat 2340  
 ttgcttataa tcgatattgg attgatgata ataataaaaa tcaatcgact gtagttgaaa 2400  
 aaaccaacac tattattaaa gagagaaaaag agcaagttag attagagccg cttgatttta 2460  
 tggaaaggaa aaaacttaat gtccatgaaa aaaagccatt tcattgttct ttatcaactc 2520  
 aatcagaggc ctggtccggg gcgaacactc agacatccag tggtaaaaca agacgatctt 2580  
 atgtacaggt gcttaaacaa gacgatatat taagggatct taaatcagcg ctgcctacag 2640  
 ctggtgaagg tatgatacca acattaaatc gaactggtgt catgacagaa agcttaagct 2700  
 cctactcaga agcatttgca aactatgctg gtatgtgtgg tggagaagta ttggacttgg 2760  
 ggtgtgccta tggaaattgca acgattgcag cgttggagcg aggggctcaa gtattagccg 2820  
 tagatatgga ggcacagcat ctggaaaatat tatcagaccg tattcgggat gaagtgaagt 2880  
 cgcgtttatc gacacaagta ggcaagttgc tggatcttca ttttgatcaa gaacgttttg 2940  
 ctgcgatcca tgcgagccga gtgctacact ttttaaaccc acaggatttc cagcaagcat 3000  
 taaaaaaaat gtatggctgg ttaaaacccg gaggaaaatt atttattgtg acggataccc 3060  
 cttatatggg ttattgggcg agcaaaagcag gggtttatga aactcgtaaa gcagcagggg 3120  
 atttatggcc aggtacata gataatgttg gttctcactt taatactaaa gagatagaag 3180  
 gggccccaac tctgatcaac ccgatggacc cgaaaatact gcactcgtgaa tgcaaaaaat 3240  
 ttgggttttca tgtagaagag actgtttttt ttgcaggaga agcctttgca ctaataata 3300  
 gtttagaaaa atcaggtaga gagcatgttg gtataatagc attgaaagccg gaattggaag 3360  
 attccgacag gcttgagaaa tcgctattgc cagtacggaa aactgaaacg gagaataagg 3420  
 aaattagcct actgcaata cagacaatgc ttagggagag tcttgaattt gaattggata 3480

FIG. 22S (cont'd)

FIG. 22S

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tagagccgg tatgttgat gagtaaaac cttttacaga tttaggggtg gactcgataa 3540
atggagtcac ctggatacga aaatcaata gtcactatgg attatctatg actgcgacga 3600
aagtatatga ttaccctaat attattgagt tggcagagtt tttaagaaaaa caaattattt 3660
cgaatgatga aaagcagcat caaccatcta tatcaacaat atttccact tcattggatg 3720
aattattgaa aaaaatacaa gaaggtaact tagggattga agaagccgac caattaattg 3780
atgaactacc tgattaccat ctagatatgg aactccatga gttgttataa gggaaaagcga 3840
ggtaattttt tgtcacacgg atggatggta aaaccatttt ggctgaaaaa aatttagctc 3900
aaatcggcgc agcttttgct cgtccgagtg atttgacttg ttatggtgaa ctcaactatg 3960
cttgtaaggc atttccttac ataagtaggt gaaaaatgga aacaattagt gtaaaccaat 4020
ttagagacaa ttgaaaaagt ttgtagaac agcagtttag cagcatgag ccaattaaag 4080
taacgcgcag agccagtga gctttcgtcg tgataagtgc cgatgattgg gagcaagaac 4140
aggaaaagcct ttatatttt cagaatagtg atttgatgca acaaatgca gattcgcttg 4200
gtacgcatac tcagggcaag ggatacaaac caacggataa tgagttgaat gaaatcactg 4260
gtgcttgaag gccatacctg gaaaacttgg gaaagcttt gcgagcaaga taagcggtta 4320
cacaaggcgt tatgcaaaact actcaagaa atgcttcact cggaagatct aacctccgga 4380
ttaggtaaac ctgagccgct taagcataac ttatctggct tatggtctcg gcgcatttcg 4440
caaaaagacc gactgataa tcgctttatt ttcgctatcg gtggtcacta cgatcaacat 4500
ttagttgcc aacgccata acaagggaac atatgaagcg cagcggaatc ttttcccttg 4560
tggttacgct tggtataagg ttgtttattc atttagactc cctctgtgtt tactgcaytg 4620
tgtggtagcc agtccagtcc acgttttttg kgggcsrwt tcaatgtgct tgtatacac 4680
ttagatgtcc gaaaakgraa mcamcmcc attgtatat tyttttaact caatggataa 4740
atgttttata gctaaactgtg aagcttcgat tgcctgattg aactcacgat catttttctc 4800
tgatttttca taaaaggcgt taggtgaaaa tgaagctgggt tctgattttt tatgtacagc 4860
tttattcctg aatctaatta aaactttcat atattgatat gcttgctttg atttatcaat 4920
ttcttttcca gtaataattc gtgtgcaaac tagccattta gaaataatat ctaattttatc 4980
taagtgtctc acaaccgtat ttgtcagaca aaatgacgag cagaaaaatc wtagactgta 5040
tattcttaaa tacwtagagg acaattwtcm caaaaagat wtcttgctc cactgaggct 5100
atctcttctt tgkaatcttt atccctaata ttttccagc ttagtgacca ataattttata 5160
tcatwmaggt actctgtaag ccgataatac cttttgctta tatcccaata attgggacca 5220

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FIG. 22S (cont'd)

aaaaaagtgc aaaagcgtgg gcgcagatcg agaaatttat tccgttgagg aatagactat 5280  
 ttgcatcaat tactgctcaa wgcgcgtgaa aatttctgca aattggtaag ggctttacgt 5340  
 gttttgtctt gtacawagct gttctattca gcaggagaca aacatggatt agcaagtatg 5400  
 ggtgtagtta tcaactkaaa aaatcattgg cagtatagtc aactcattga aagtcctata 5460  
 ttaacgtcgc cgaaggttaa atagttttta cgatgagatg taggcattgt gataaatgtg 5520  
 ctgcacatca tcacaatcat tcagcatatc cataaacctc tcgaacatct taacatcatc 5580  
 tcccgtcact ggagtgttg tttgaggaat aaattggatt tcgtcgacat crractgaag 5640  
 cttttcaaa gcttcagata acgcttgctt ggccttaaaa tattcagtat gaggaaccag 5700  
 tacgctgac ttaccgtttt ttgcttcaat atcggtgaca tccacatttt ccatcattaa 5760  
 tgtctccaat acgactttct cgtcatttcc agtgaaaaa aggattgcac aatgattaaa 5820  
 catatggcta aactgcctt gggtaaccaat cttgcttttg gttttggtaa acaaaatagc 5880  
 cacatcaccc aaggtgcgat tggggttacc ataaawaa cgttaaaaa tcaakaawam ccatamagtt 5940  
 ccnaggctcc caaaccttc ataacggagt gscaawaaag tyttcccmcc mcgscctccc 6000  
 tttagctttg tytagggcct tttgaaataa cgtgggcttg gaancttggt ttttttttgc 6060  
 tttatctatc catactgcgt agagcaagat taccttcttg atcactccc cntgatttt 6120  
 gcacagacat aaattgcgcg accataattg ctgtagactt tggctttggc atcggagggt 6180  
 ttagccattg attcttttgcg gttctgatat gctcgaccca ttataaacc cctgattttt 6240  
 attgaacgaa gagggtattt tacaggtaac tatgagtatg gggaacctgc taatagtmnw 6300  
 ckwtgtccm wtatymarra ttgcyggttg ttgtygcttc tgamtaaac ctcaatattt 6360  
 gatagattca ctgaatcatt atcattaatg ggtttgataa gtatttataa gaggttttgcg 6420  
 gtatgatgca gtttghtaatt acctcctccc ccataataat aatgtactgt aaggaaactc 6480  
 aatgtcttac gattatgatt tgtttgtgat tggcgccggt tctggtgggtg tgcgtgcgag 6540  
 tcgtattgca gcaggccttg gcgctaaaagt cgcggtagct gaggatctct tcttgggtgg 6600  
 tacttgtgtt aatgttgggt gtgtaccaaa aaagcttttg gttctatggg tcacmttttt 6660  
 ytgaagagtt traascagcc gcagggtttg gttggacaat agggtcacat tcttttcatt 6720  
 ggccamcatt acgtgacaat aaracaaaaa aaatcgagcg tcttaatggc ggtttatcaa 6780  
 aacctcttag aaaagtgcgg gagtcgatat tattaatggg cggggcgacc attattgatc 6840  
 ctcatagcat agcagttggg gacagacagt tttactgctg aacgtatttt agttgctggc 6900  
 ctgccattcc tgatattcca gggagagaa atattatcag ttnctaaca agtgkkttt 6960

FIG. 22S (cont'd)

ckgraagmsk	wmckaaaaws	srwwgctgtc	gtagggggtg	gctatatgtc	tgtagtatt	7020
gcaggtat	ttcaagggtt	gggtagtgac	attcatttat	tgtatcgagg	tgatttat	7080
ctaagggat	ttgatcgaga	tgctcgtgaa	tttactgcca	gtgagatgat	aaagaaagg	7140
gtaaat	attttaatcg	cagtgtttct	gctattgaaa	agcaagtgg	tgtagccta	7200
ttagtggat	taactgatgg	ctcaaccttg	gaagtggata	ctattatgta	tgccacaggt	7260
ygaaaaccar	rmmyygaggs	wygtgktyt	ksawwrkrsc	gctgtmaas	krckyaaa	7320
gggaagcctt	tycaagtnta	actgakaayt	tttcaaanca	agcagaagcc	wbtytawtt	7380
aygcaagtwa	gggawtgtt	aatagaccgg	tatgncaatk	aacvccaagt	tgstctsggc	7440
tgaarggtat	ggmcttaagc	mcagctttta	tattagtgc	tmcagtggat	taataanggt	7500
agattatggg	tttsgttgc	cmagaaccgg	ttttnttgc	caamccaan	tatgggcacc	7560
gtaggttata	gtgaagagcg	ggccaagrgm	wragtttgat	acggtgbctg	tttadaaat	7620
gattttaaa	ccagatgaag	ncatacgctg	agtncttct	tngatngagc	ggactttttg	7680
tgaagtnwat	tagtagancc	aaaacnmcag	ataragtcac	aggttgtcat	atggtaggcg	7740
ctcracgcgg	gagaaatctt	gntattgcca	taaaggcagg	agccaccaa	gcagactttg	7800
atagcaccat	aggtattcac	cctacggttg	ccgaagagtt	tgtgactatg	agagagcctg	7860
cgtatatatt	atagcaatag	gccaaggcca	gctacttggt	ttagtaaggc	tatttttaca	7920
aatagtacca	tcagataata	taktgcggta	gtttacgttc	yamtgaatca	kcagtkgtma	7980
wakkagtcac	atagcaygms	gwrtkatatag	kgkattcata	yyrtrcawaa	syaykckgt	8040
cgtagaggga	yataatkctc	akrataatat	wrttcgasw	cctgtysakk	ccwaccacr	8100
satacywssc	aaagarttgy	agtratacrag	ckwtgsakws	tgamcngtgs	matnakgttc	8160
aacgcatkcc	ccagcctkat	agcatcygac	caytsagggc	caawrkmgmt	taaycccagt	8220
gtwcnngttns	atrnrsgacs	mgktaatggg	mgtgtwtst	wrkawgccsg	mtctmmaaa	8280
mcmnsanngmr	acgtacaaagm	rtgwcaccmg	krkgytrya	snmatmgct	atcamrcnca	8340
yssrrgggkk	ggycttmawa	araggggcaa	aaaaaaaaa			8380

FIG. 22S (cont'd)



Lys Leu Gly Asp Pro Ile Glu Val Glu Thr Leu Ala Glu Ser Phe Arg SEQID NO:11  
 1 5 10 15  
 Val Tyr Thr Asp Lys Arg His Tyr Cys Ala Leu Gly Ser Val Lys Ser  
 20 25 30  
 Asn Ile Gly His Leu Gly Val Gly Ala Gly Ile Ala Gly Val Thr Lys  
 35 40 45  
 Val Leu Leu Ser Leu Gln His Arg Met Leu Pro Pro Thr Ile His Cys  
 50 55 60  
 Glu Asp Val Asn Pro Gln Ile Ala Leu Glu Gly Ser Pro Phe Tyr Ile  
 65 70 75 80  
 Asn Thr Glu Leu Lys Pro Trp Gln Ser Gly Asp Gly Ile Pro Arg Arg  
 85 90 95  
 Ala Gly Val Ser Ser Phe Gly Val Ser  
 100 105

FIG. 22T

SEQID NO:12

Lys Leu Gly Asp Pro Ile Glu Val Glu Thr Leu Ala Glu Ser Phe Arg  
1 5 10 15

Val Tyr Thr Asp Lys Arg His Tyr Cys Ala Leu Gly Ser Val Lys Ser  
20 25 30

Asn Ile Gly His Leu Gly Val Gly Ala Gly Ile Ala Gly Val Thr Lys  
35 40 45

Val Leu Leu Ser Leu Gln His Arg Met Leu Pro Pro Thr Ile His Cys  
50 55 60

Glu Asp Val Asn Pro Gln Ile Ala Leu Glu Gly Ser Pro Phe Tyr Ile  
65 70 75 80

Asn Thr Glu Leu Lys Pro Trp Gln Ser Gly Asp Gly Ile Pro Arg Arg  
85 90 95

Ala Gly Val Ser Ser Phe Gly Val Ser Gly Thr Asn Ala His Leu Val  
100 105 110

Leu Glu Glu Tyr Thr His Arg Val Thr Ser Pro Leu Gln Asn Thr Ile  
115 120 125

Leu Pro Gln Asn Gly Leu Phe Ile Val Pro Leu Ser Ala Lys Asn Asp  
130 135 140

Glu Cys Leu Asn Ala Cys Val Glu Arg Leu Leu Phe Phe Leu Lys Ser	160
145	155
Arg Gln Ser Asp Thr Tyr Lys Lys Tyr Ser Leu Ser Asp Thr Ala Pro	175
165	170
Ile Leu Leu Asp Leu Ala Tyr Thr Leu Gln Val Ser Arg Glu Ala Met	190
180	185
Thr Lys Arg Val Ala Phe Val Val Lys Thr Thr Ile Glu Leu Met Glu	205
195	200
Lys Leu Asn Ala Phe Ile Glu Lys Lys Gln Asn Thr Ile Lys Ala Ser Asn	220
210	215
Ile Lys Gly Cys Tyr Tyr Ser Ser Thr Lys Thr Ser Ser Pro Phe Asp	240
225	230
235	235
Asn Glu Ser Thr Asp	245

FIG. 22U (cont'd)

Arg Leu Gly Asp Pro Ile Glu Leu Ala Ala Leu Ser Lys Ala Phe Glu SEQID NO:14  
1 5 10 15  
Glu Gly Thr Gln Arg Lys Gln Phe Cys Gly Ile Gly Ser Val Lys Ser  
20 25 30  
Asn Ile Gly His Leu Asp Val Ala Ala Gly Val Val Gly Leu Ile Lys  
35 40 45  
Thr Ala Leu Ser Leu Gln His Arg Leu Leu Pro Pro Thr Ile Asn Tyr  
50 55 60  
Glu Ala Pro Asn Arg Glu Ile Asn Phe Glu Gln Ser Pro Phe His Val  
65 70 75 80  
Ile Asp Glu Leu Thr Glu Trp Arg Gly Gln Gly Gly Pro Leu Arg Ala  
85 90 95  
Gly Val Ser Ser Phe Gly Ile Gly  
100

FIG. 22V

FIG. 22W

Glu Tyr Gly Asp Pro Met Glu Leu Thr Ala Ala Ala Val Phe Gly SEQID NO:18  
 1 5 10 15  
 Arg Gly Arg Asn Gln Lys Asn Arg Leu Val Gly Ser Val Lys Ala  
 20 25 30  
 Asn Ile Ser His Leu Glu Ala Ala Gly Gly Ile Ser Gly Leu Ile Lys  
 35 40 45  
 Ala Val Leu Ala Met Gln His Gly Val Ile Pro Gln Gln Leu His Cys  
 50 55 60  
 Lys Glu Pro Ser Pro His Ile Pro Trp Lys Arg Leu Pro Leu Asp Leu  
 65 70 75 80  
 Val Gln Glu Gln Thr Val Trp Pro Glu Ser Glu Glu Arg Ile Ala Ala  
 85 90 95  
 Val Thr Ala Ser Asp  
 100

FIG. 22X

[illegible]

FIG. 22a

Ala Leu Gly Asp Pro Ile Glu Phe Gly Ala Ile Lys Ala Val Tyr Gly SEQID NO:22  
1 5 10 15  
Pro Gly Arg Ser Ser Pro Leu Val Leu Gly Ala Leu Lys Ser Asn Ile  
20 25 30  
Gly His Leu Glu Ala Thr Ala Gly Val Ala Ala Leu Ile Lys Ala Val  
35 40 45  
Leu Val Leu Gln His Gly Val Ala Pro Ala Asn Leu His Cys His Lys  
50 55 60  
Leu Asn Pro Leu Leu Asp Ile Asp Gly Phe Asn Val Val Phe Pro Gln  
65 70 75 80  
Ser Glu Thr Pro Leu His Ser Ser Leu Gln Leu Leu Gly Tyr Gln  
85 90 95  
Phe Val Arg Val Trp  
100

FIG. 22Z



Thr Trp Xaa Ser Leu Leu Arg Trp Gly Leu Leu Gln Asn His Phe Asp SEQID NO:24  
 1 5 10 15  
 Pro Tyr Thr Glu Lys Lys Asn Tyr Cys Ala Ser Gly Ser Val Lys Ser  
 20 25 30  
 Asn Ile Gly His Leu Thr Ala Ala Gly Val Ser Gly Val Val Lys Val  
 35 40 45  
 Leu Leu Ala Leu Lys His Lys Gln Leu Pro Pro Ser Cys His Leu Val  
 50 55 60  
 Lys Ile Asn Glu His Ile Asn Leu Glu Asp Ser Pro Phe Tyr Ile Asn  
 65 70 75 80  
 Thr Ala Leu Lys Lys Trp Glu Val Ser Glu Gly Glu Ala Arg Arg Ala  
 85 90 95  
 Ala Val Ser Ser Phe Gly Ser  
 100

FIG. 22A

Pro Leu Gly Asp Pro Ile Glu Met Ala Ala Leu Lys Gln Ala Phe Gly SEQID NO:24  
 1 5 10 15  
 Thr Gln Lys Lys Tyr Cys Ala Ile Gly Ser Val Lys Ser Asn Ile  
 20 25 30  
 Gly His Ala Asp Thr Ala Ala Gly Val Ala Gly Leu Ile Lys Thr Val  
 35 40 45  
 Met Ala Leu Lys Ala Arg Gln Ile Pro Pro Ser Leu His Phe Glu Thr  
 50 55 60  
 Pro Asn Pro Gln Ile Asp Phe Ala Asp Ser Pro Phe Tyr Val Asn Thr  
 65 70 75 80  
 Thr Leu Lys Asp Trp Asn Thr Asn Gly Val Pro Arg Arg Ala Gly Val  
 85 90 95  
 Ser Ser Phe Gly Ile Gly  
 100

FIG. 22BB

Val Val Gly Asp Pro Ile Glu Val Val Gly Leu Thr Lys Ala Tyr Gln SEQID NO:28  
 1 5 10 15  
 Ala His Thr Gln Glu Arg Gln Tyr Cys Gly Leu Gly Ser Val Lys Thr  
 20 25 30  
 Asn Ile Gly His Thr Asp Ser Ala Ala Gly Ile Ala Gly Leu Leu Lys  
 35 40 45  
 Ile Val Met Ala Met Lys His Arg Gln Leu Pro Pro Ser Leu Asn Phe  
 50 55 60  
 Glu Thr Pro Asn Pro Asp Leu Asp Leu Glu Asn Ser Pro Phe Phe Ile  
 65 70 75 80  
 Gln Thr Lys Leu Lys Asp Trp Glu Ser Val Gly Pro Arg Arg Ala Ala  
 85 90 95  
 Leu Ser Ser Phe Gly Leu Gly  
 100

FIG. 22CC

Met Val Val Val Glu Glu Phe Phe Val Ser Tyr Arg Asp Ile Leu Lys SEQID NO:38  
 1 5 10 15  
 Ala Leu Gln Asp Glu Lys Ile Ser Phe Glu Glu Ala Lys Tyr Lys Leu  
 20 25 30  
 Ile Lys Arg Lys Asp Lys Lys Ser Lys Gln Arg Leu Asn His Asp Arg  
 35 40 45  
 Glu Leu Asn Arg Ser Met Asn Ile Thr Pro Lys Ile Val Asn Asn Tyr  
 50 55 60  
 Gly Leu Val Leu Leu Gly Gly His Leu Phe Glu Glu Leu Arg Leu Ser  
 65 70 75 80  
 Glu Trp Lys Ala Ala Asn Pro Asn Pro Asn Glu Val Ser Ile Gln Val  
 85 90 95  
 Lys Ala Ser Ala Ile Ser Phe Thr Asp Thr Leu Cys Val Gln Gly Leu  
 100 105 110  
 Tyr Pro Ser His Tyr Pro Phe Val Pro Gly Phe Glu Val Ser Gly Val  
 115 120 125  
 Ile Arg Gln Val Gly Glu His Ile Thr Asp Leu His Val Gly Asp Glu  
 130 135 140

Val Ile Ala Phe Thr Gly Ser Ser Met Gly Gly His Ala Ala Tyr Val	145	150	155	160
Thr Val Pro Gln Asp Tyr Val Val Arg Lys Pro Lys Asp Leu Ser Phe	165	170	175	
Glu Asp Ala Cys Ser Phe Pro Leu Ala Phe Ala Thr Val Tyr His Ser	180	185	190	
Phe Ala Arg Gly Lys Leu Ser His Asn Asp His Ile Leu Ile Gln Thr	195	200	205	
Ala Thr Gly Gly Cys Gly Leu Met Ala Leu Gln Leu Ala Arg Leu Lys	210	215	220	
Gln Cys Val Cys Tyr Gly Thr Ser Ser Arg Glu Asp Lys Leu Ala Leu	225	230	235	240
Leu Lys Gln Trp Ala Leu Pro Tyr Val Phe Asn Tyr Lys Thr Cys Asn	245	250	255	
Ile Asp Glu Glu Ile Gln Arg Val Ser Gly His Arg Gly Val Asp Val	260	265	270	
Val Leu Asn Met Leu Pro Gly Glu His Ile Gln Gln Gly Leu Asn Ser	275	280	285	

FIG. 22DD (cont'd)

Leu	Ala	Lys	Gly	Gly	Arg	Tyr	Leu	Glu	Leu	Ser	Met	His	Gly	Leu	Leu
290						295					300				
Thr	Asn	Glu	Pro	Val	Ser	Leu	Ser	Ser	Leu	Arg	Phe	Asn	Gln	Ser	Val
305					310					315					320
Gln	Thr	Ile	Asn	Leu	Leu	Gly	Leu	Leu	Asn	Lys	Gly	Asp	Asp	Gly	Phe
				325					330					335	
Ile	Gly	Ser	Val	Leu	Ala	Gln	Met	Val	Ser	Trp	Ile	Glu	Ser	Gly	Asp
			340					345					350		
Leu	Val	Ser	Thr	Val	Ser	Arg	Ile	Tyr	Pro	Leu	Asp	Gln	Ile	Gly	Glu
		355					360					365			
Ala	Leu	Arg	Tyr	Val	Ser	Glu	Gly	Glu	His	Ile	Gly	Lys	Val	Val	Val
	370					375				380					
Ser	His	Thr	Ala	Thr	Glu	Pro	Met	Asp	Cys	Arg	Gln	Arg	Cys	Ile	Asp
385					390					395				400	
Asn	Val	Leu	Lys	Gln	Gly	Gln	Met	Ala	Ala	Leu	Thr	Ala	Thr	Gly	Gly
				405					410					415	
Lys	Ser	Arg	Val	Trp	Gly	Gly	Thr	Gly	Val	Asn	Asp	Lys	Pro	Ser	Pro
			420					425					430		

FIG. 22DD (cont'd)

Ala Val Gly Ile Glu Glu Arg Leu Leu Glu Gly Ile Ala Val Ile Gly	435	440	445
Leu Ser Gly Gln Tyr Pro Lys Ser Lys Thr Leu Glu Gln Phe Trp Gln	450	455	460
Thr Leu Ala Asp Gly Val Asp Cys Ile Ser Glu Ile Pro Ala Asp Arg	465	470	475
Trp Ser Leu Glu Glu Tyr Tyr Ser Pro Ile Pro Glu Gly Lys Thr	485	490	495
Tyr Cys Lys Trp Met Gly Val Leu Glu Asp Met Asp Cys Phe Asp Pro	500	505	510
Leu Phe Phe Ala Ile Ser Pro Arg Glu Ala Glu Val Met Asp Pro Gln	515	520	525
Gln Arg Leu Phe Leu Glu Asn Ala Trp Ser Cys Ile Glu Asp Ala Gly	530	535	540
Ile Asn Pro Lys Met Leu Ser Arg Ser Arg Cys Gly Val Phe Val Gly	545	550	555
Cys Gly Ala Asn Asp Tyr Ser Ala Leu Met Asn Ser Ser His Ser Thr	565	570	575

FIG. 2200D (cont'd)

Ser	Leu	Glu	Leu	Met	Lys	Glu	Leu	Gly	Asn	Asn	Ser	Ser	Ile	Leu	Ser
		580						585						590	
Ala	Arg	Ile	Ser	Tyr	Phe	Leu	Asn	Leu	Lys	Gly	Pro	Cys	Leu	Ala	Ile
		595				600						605			
Asp	Thr	Ala	Cys	Ser	Ser	Ser	Leu	Val	Ala	Ile	Ala	Glu	Ser	Cys	Asn
		610				615					620				
Ser	Leu	Val	Leu	Gly	Thr	Ser	Asp	Leu	Ala	Leu	Ala	Gly	Gly	Val	Leu
		625				630				635					640
Leu	Met	Pro	Gly	Pro	Ser	Leu	His	Ile	Gly	Leu	Ser	His	Gly	Glu	Met
				645					650					655	
Leu	Ser	Val	Asp	Gly	Arg	Cys	Phe	Thr	Phe	Asp	Gln	Arg	Ala	Asn	Gly
			660					665					670		
Phe	Val	Pro	Gly	Glu	Gly	Val	Gly	Val	Val	Leu	Leu	Lys	Arg	Met	Ser
		675					680					685			
Asp	Ala	Val	Arg	Asp	Gly	Asp	Pro	Ile	Arg	Ala	Val	Ile	Arg	Gly	Trp
		690				695					700				
Gly	Val	Asn	Gln	Asp	Gly	Arg	Ser	Asn	Gly	Ile	Thr	Ala	Pro	Ser	Ser
		705				710				715					720

FIG. 22DD (cont'd)



Lys	Ala	Gln	Ser	Ala	Leu	Glu	Gln	Glu	Val	Tyr	Gln	Arg	Phe	Asn	Ile
				725					730					735	
Asp	Pro	Ser	Ser	Ile	Thr	Leu	Val	Glu	Ala	His	Gly	Thr	Gly	Thr	Lys
				740				745						750	
Leu	Gly	Asp	Pro	Ile	Glu	Val	Glu	Ala	Leu	Ala	Glu	Ser	Phe	Arg	Val
				755			760					765			
Tyr	Thr	Asp	Lys	Arg	His	Tyr	Cys	Ala	Leu	Gly	Ser	Val	Lys	Ser	Asn
						775					780				
Ile	Gly	His	Leu	Gly	Val	Gly	Ala	Gly	Ile	Ala	Gly	Val	Thr	Lys	Val
						790				795					800
Leu	Leu	Ser	Leu	Gln	His	Arg	Met	Leu	Pro	Pro	Thr	Ile	His	Cys	Glu
									810					815	
Asp	Val	Asn	Pro	Gln	Ile	Ala	Leu	Glu	Gly	Ser	Pro	Phe	Tyr	Ile	Asn
								825					830		
Thr	Glu	Leu	Lys	Pro	Trp	Gln	Ser	Gly	Asp	Ser	Ile	Pro	Arg	Arg	Ala
								840				845			
Gly	Val	Ser	Ser	Phe	Gly	phe	Ser	Gly	Thr	Asn	Ala	His	Leu	Val	Leu
								855							

FIG. 22DD (cont'd)

Glu	Glu	Tyr	Leu	Pro	His	Ser	Thr	Gly	Thr	Ile	Glu	Ser	Phe	Ala	Ala	880
865					870					875						
Asn	His	Ala	Ser	Thr	Val	Ile	Ile	Pro	Leu	Ser	Ala	Lys	Ser	His	Asn	895
				885				890								
Ser	Leu	Tyr	Thr	Tyr	Ala	Gln	Thr	Leu	Leu	Ile	Phe	Leu	Lys	Arg	Ser	910
				900				905								
Gln	Val	Thr	Asp	Ala	Lys	Lys	Ile	Thr	Ile	Asp	His	Met	Glu	Cys	Arg	925
			915					920								
Leu	Leu	Asp	Leu	Ala	Tyr	Thr	Leu	Gln	Val	Gly	Arg	Glu	Ala	Met	Asp	930
						935						940				
Lys	Arg	Ile	Ser	Phe	Ile	Val	Asn	Thr	Lys	Gln	Ala	Leu	Val	Glu	Lys	960
945					950					955						
Leu	Asn	Ala	Phe	Leu	Glu	Lys	Glu	Lys	Thr	Ile	Thr	Asp	Cys	Tyr	His	975
				965					970							
Tyr	Leu	Phe	Asp	Ser	Asp	Lys	Pro	Ser	Thr	Glu	Ile	Phe	Arg	Leu	Asp	990
				980				985								
Glu	Asp	Asp	Lys	Val	Leu	Ile	Asn	Ser	Trp	Ile	Ser	Gln	Ser	Gln	Tyr	1005
								1000								

FIG. 22DD (cont'd)

PROTEIN "BEE5260"

His Lys Leu Ala Glu Ala Trp Ser Gln Gly Leu Asp Ile Asp Trp Thr	
1010	1015 1020
Leu Leu Tyr Thr His Ser Ser Thr Pro Arg Arg Ile Ser Leu Pro Thr	
1025	1030 1035
Tyr Pro Phe Ala Arg Asp Arg Tyr Trp Leu Pro Glu Lys Pro Arg Tyr	
	1045 1050 1055
Asn Ala Ala Asn His Pro Val Ser Asn His Gln Thr Thr Thr Gln Asn	
	1060 1065 1070
His Ser Arg Phe Ala Ile Asp Thr Asp His Asp Val Val Ala Glu Ile	
	1075 1080 1085
Met Gln Lys Thr His Gln Gln Glu Leu Glu Gln Trp Leu Leu Lys Leu	
1090	1095 1100
Leu Phe Val Gln Leu Gln His Met Gly Leu Phe Gln His Arg Val Phe	
1105	1110 1115 1120
Glu Thr Ala Thr Ala Leu Arg Gln Ser Ala Gly Ile Val Asp Lys Tyr	
	1125 1130 1135
Asp Arg Trp Trp His Glu Cys Leu Ser Val Leu Gln Asp Ala Gly Tyr	
	1140 1145 1150

FIG. 22DD (cont'd)

Leu Glu Trp Lys Asp Asp Ser Val Ala Ala Gln Ala Leu Glu Ser  
 1155 1160 1165  
 Glu Ser Gln Glu Ala Trp Trp Ser Arg Trp Asn Thr Glu Tyr Lys His  
 1170 1175 1180  
 Tyr Gln Asn Asp Pro Glu Lys Lys Thr Leu Ala Ile Leu Ile Asn Asp  
 1185 1190 1195 1200  
 Cys Leu Gln Ala Leu Pro Gly Val Leu Ser Gly Glu Gln Leu Ile Thr  
 1205 1210 1215  
 Asp Ile Ile Phe Pro Asn Gly Ser Met Glu Lys Met Glu Gly Leu Tyr  
 1220 1225 1230  
 Lys Asn Asn Arg Ile Ala Asp Tyr Cys Asn Gln Cys Val Gly Asp Leu  
 1235 1240 1245  
 Leu Val Gln Phe Ile Glu Ala Arg Leu Ser Arg Asp Ala Asn Ala Arg  
 1250 1255 1260  
 Ile Arg Ile Ile Glu Ile Gly Ala Gly Thr Gly Gly Thr Thr Ala Ile  
 1265 1270 1275 1280  
 Val Leu Pro Met Leu Gln Ala Tyr Gln Asp His Ile Asp Thr Tyr Cys  
 1285 1290 1295

FIG. 22DD (cont'd)

Tyr Thr Asp Val Ser Lys Ala Phe Leu Met His Gly Gln Glu His Tyr  
     1300                   1305                   1310  
  
 Gly Glu Gln Tyr Pro Tyr Leu Ser Tyr Cys Leu Cys Asn Ile Glu Gln  
     1315                   1320                   1325  
  
 Asp Leu Val Ala Gln Gly Ile Ser Val Gly Asp Tyr Asp Ile Ala Ile  
     1330                   1335                   1340  
  
 Ala Ala Asn Val Leu His Ala Thr Arg Asn Ile His Glu Thr Val Ser  
     1345                   1350                   1355                   1360  
  
 His Val Arg Gln Ala Leu Ala Ala Asn Gly Leu Leu Ile Leu Asn Glu  
     1365                   1370                   1375  
  
 Phe Ser Gln Lys Ser Val Phe Ser Ser Val Ile Phe Gly Leu Ile Asp  
     1380                   1385                   1390  
  
 Gly Trp Ala Leu Ser Glu Asp Thr Gly Leu Arg Ile Pro Gly Ser Pro  
     1395                   1400                   1405  
  
 Gly Leu Tyr Pro Lys Gln Trp Gln Ala Val Leu Glu Ala Ser Gly Phe  
     1410                   1415                   1420  
  
 Gly Asp Val Glu Phe Pro Leu His Asp Ala Arg Glu Leu Gly Gln Gln  
     1425                   1430                   1435                   1440

FIG. 22DD (cont'd)

Ile Ile Leu Ala Thr Asn Ala His Ala Asn Val Ala Ser Asp Leu Ala  
1445 1450 1455

Thr Ser Val Ile Asp His Ala Pro Lys Arg Leu Pro Ser Ala Glu Val  
1460 1465 1470

Ser Met Asp Glu Arg Val Ser His Asp Ala Met Met Lys Ala Ser Val  
1475 1480 1485

Lys Gln Leu Leu Val Glu Gln Leu Ser Gln Ser Leu Lys Leu Asp Met  
1490 1495 1500

Asn Glu Ile His Pro Asp Glu Ser Phe Ala Asp Tyr Gly Val Asp Ser  
1505 1510 1515 1520

Ile Thr Gly Ala Ser Phe Ile Gln Gln Leu Asn Asp Thr Leu Thr Leu  
1525 1530 1535

Thr Leu Lys Thr Val Cys Leu Phe Asp His Ser Ser Val Asn Arg Leu  
1540 1545 1550

Thr Ala Tyr Leu Leu Ser Asp Tyr Gly Asp Asp Ile Ala Gln Trp Leu  
1555 1560 1565

Ala Thr Ala Pro Ala Leu Val Asp His Pro Gln Ser Val Val Ser Gln  
1570 1575 1580

TEOT 865460

Val Leu Pro Glu Arg Ser Pro Ala Ser Thr Gln Ala Lys Pro Leu Pro  
1585 1590 1595 1600  
Ser Val Pro Pro Ser Leu Ser Met Glu Ser Pro Val Gln Gln Glu Ser  
1605 1610 1615  
Ile Ala Ile Ile Gly Met Ser Gly Arg Phe Ala Ala Ser Glu Asn Leu  
1620 1625 1630  
Glu Ala Phe Trp Gln Gln Ileu Ala Gln Gly Val Asp Leu Val Glu Pro  
1635 1640 1645  
Ala Ser Arg Trp Gly Pro Gln Ala Glu Thr Tyr Tyr Gly Ser Phe Leu  
1650 1655 1660  
Lys Asp Met Asp Gln Phe Asp Pro Leu Phe Phe Asn Leu Ser Gly Val  
1665 1670 1675 1680  
Glu Ala Ser Tyr Met Asp Pro Gln Gln Arg Cys Phe Leu Glu Glu Ser  
1685 1690 1695  
Trp Asn Ala Leu Glu Asn Ala Gly Tyr Val Gly Asp Gly Ile Glu Gly  
1700 1705 1710  
Lys Arg Cys Gly Ile Tyr Ala Gly Cys Val Ser Gly Asp Tyr Ala Gln  
1715 1720 1725

FIG. 22 DD (cont'd)

FIG. 22DD (cont'd)